

**ATTACHMENT F
 AREAS OF SPECIAL BIOLOGICAL SIGNIFICANCE
 IMPLEMENTATION REQUIREMENTS**

OVERVIEW

The requirements in this Attachment implement State Water Board Resolution No. 2012-0012 (as amended by State Water Board Resolution No. 2012-0031), the General Exception to the California Ocean Plan for Selected Discharges into Areas of Special Biological Significance, Including Special Protections for Beneficial Uses ([General Exception](#)).

F1. SUBMITTALS

All reports and plans shall be uploaded to SMARTS under the “attachments” tab unless notified otherwise by the State Water Board Executive Director. In addition to SMARTS, reports and plans shall be submitted in writing to applicable Regional Water Board Executive Officer for review and consideration of approval.

F2. APPLICABLE PERMITTEES

Small MS4 Permittees granted an exception to the Ocean Plan and subject to the provisions of this attachment are listed below.

Table F2. Small MS4 Permittees Granted an Exception to the Ocean Plan

Regional Water Board	Applicable Small MS4 Permittee	ASBS
North Coast	City of Trinidad, Trinidad Head	Trinidad Head
North Coast	County of Humboldt, Shelter Cove Community Area	King Range
North Coast	California Department of Parks and Recreation, Gerstle Cove State Marine Conservation Area	Gerstle Cove
North Coast	California Department of Parks and Recreation, Jug Handle State Natural Reserve	Jug Handle Cove
North Coast	California Department of Parks and Recreation, Trinidad State Beach	Trinidad Head
North Coast	California Department of Parks and Recreation, Del Norte Coast Redwoods State Park and Prairie Creek Redwoods State Park	Redwoods State and National Park

Regional Water Board	Applicable Small MS4 Permittee	ASBS
San Francisco Bay	County of Marin, Duxbury Reef	Duxbury Reef
San Francisco Bay	California Department of Parks and Recreation, Montara State Beach	James V. Fitzgerald
Central Coast	City of Monterey	Pacific Grove
Central Coast	City of Pacific Grove	Pacific Grove
Central Coast	City of Carmel-by-the Sea	Carmel Bay
Central Coast	County of Monterey	Carmel Bay
Central Coast	California Department of Parks and Recreation, Año Nuevo State Park and Año Nuevo State Reserve	Año Nuevo
Central Coast	California Department of Parks and Recreation, Carmel River State Beach	Carmel Bay
Central Coast	California Department of Parks and Recreation, Julia Pfeiffer Burns State Park	Julia Pfeiffer Burns
Central Coast	California Department of Parks and Recreation, Point Lobos State Natural Reserve	Point Lobos
Central Coast	Pillar Point Air Force Station, Vandenberg Air Force Base (Department of Defense)	James V. Fitzgerald
Santa Ana	California Department of Parks and Recreation, Crystal Cove State Park	Irvine Coast

F3. DISCHARGE PROHIBITIONS

ASBS-specific prohibitions are provided in section 5.2 of this Order.

F4. UPDATED ASBS COMPLIANCE PLAN

Within 1 year of the effective date of this Order, the Permittee shall submit an updated ASBS Compliance Plan, including the monitoring plan.

The Permittee’s updated ASBS Compliance Plan shall address the following requirements:

1. General

The updated ASBS Compliance Plan shall be submitted in track changes or as an addendum to the plan submitted under the previous permit. In either case, the ASBS Compliance Plan submitted under the previous permit must be included (either with the track changes or with the addendum).

2. Monitoring Plan

The Monitoring Plan shall include the following:

- a. Revisions to the monitoring plan for resampling in the event the Permittee has not completed required resampling for any exceedances of natural ocean water quality under the previous permit. Use the [flowchart](#) in this Attachment to determine an exceedance of natural ocean water quality.
- b. Revisions to the monitoring plan to continue Core and Receiving Water monitoring if the Executive Director of the State Water Board has not reduced or suspended monitoring once the storm runoff is fully characterized.
- c. An updated monitoring plan with a schedule for resampling the receiving water for constituent-location pairs that exceed the 85th percentile of reference sample concentrations.
 - 1) Include a schedule for pre-and post-storm monitoring of constituent-location pairs that exceed natural ocean water quality in receiving water.
 - 2) Include USEPA analytical methods and the lowest minimum detection limits comparable to the Ocean Plan water quality objectives. For metal analysis, all samples, including stormwater effluent, reference samples, and ocean receiving water samples, shall be analyzed using Inductively Coupled Plasma/Mass Spectrometry or other approved method with the lowest minimum detection limit described in the Ocean Plan.

3. Best Management Practices

The following information shall be included to address the best management practices requirements:

- a. An updated best management practices map for the location and monitoring result pairs that indicate that discharges may be causing or contributing to alterations of natural ocean water quality, including priority discharge locations. Priority discharges are those that pose the greatest water quality threat and which are identified to require installation of structural BMPs.
 - 1) The map shall show surface drainage of stormwater runoff, areas of sheet flow of stormwater runoff, structural best management practices

already implemented, and any best management practices to be installed in the future to control the pollutants that are causing exceedance of the natural ocean water quality.

- 2) The map shall also show the storm water conveyances in relation to other features such as service areas, sewage conveyances and treatment facilities, landslides, areas prone to erosion, and waste and hazardous material storage areas, if applicable. The Compliance Plan shall also include a procedure for updating the map and plan when changes are made to the storm water conveyance facilities.¹
 - b. A description of existing and planned non-structural best management practices, including those for any construction site activities, and a corresponding implementation schedule.
 - c. A technical description of best management practices to control stormwater runoff (at the end-of-pipe) during a design storm designed to achieve on average of the following target levels:
 - 1) Instantaneous Maximum Water Quality Objectives in Chapter II, [Table 3](#), of the Ocean Plan; or
 - 2) A 90 percent reduction in pollutant loading during storm events, for the Permittee's total discharges.
4. Implementation Schedule

The Implementation Schedule shall include:

- a. An updated implementation schedule for the type and installation date of structural best management practices and practices/asures. The best management practices shall be designed to either achieve and maintain natural ocean water quality or to ensure that the permittee's discharge is not causing or contributing to alterations of natural ocean water quality by either reducing flows from impervious surfaces, reducing pollutant loading, or a combination thereof. The implementation schedule shall be designed to bring the Permittee's discharges into compliance with the requirements of the General Exception as soon as is practicable. The Permittee shall include documentation verifying that selected structural best management practices are designed such that the effluent will meet the natural ocean water qualities in the receiving water.
- b. Description of and an implementation schedule for any low impact development measures currently employed or planned. To control stormwater runoff discharges (at the end-of-pipe) during a design storm, the Permittee must first consider, and use where feasible, low impact

¹ [General Exception](#), Resolution 2012-0012, page 3.

development practices to infiltrate, use, or evapotranspire stormwater runoff on-site.

5. Include an Updated Description of the Following Requirements:
 - a. Statement indicating whether the Permittee completed the core discharge monitoring, ocean receiving monitoring, and resampling that was required under the previous permit. If the Permittee concluded that all required resampling was completed, the Permittee shall provide details to support that conclusion.
 - b. Table with post-storm receiving water samples that exceed the 85th percentile of reference sample concentrations for which best management practices were not installed under the previous permit. The table shall include the constituent-location pair, ASBS location name, and the ocean receiving water site identification number.
 - c. Description of measures by which any non-authorized non-storm water discharges (e.g. dry weather flows) have been or will be eliminated, how these measures will be maintained over time, monitored, and documented.
 - d. Description of stormwater outfall drains equal to or greater than 18 inches in diameter or width inspected once prior to the beginning of the rainy season and once during the rainy season.
 - e. Description of how pollutant reductions in stormwater runoff will be achieved through best management practices to comply with the special conditions in the General Exception.
 - f. Description of how to address erosion control and prevent anthropogenic sedimentation. The natural habitat conditions in the ASBS shall not be altered because of anthropogenic sedimentation.
 - g. Description of the Permittee's strategy to ensure the discharges to the areas listed in the table required under section F4, item 5.b., above, comply with the special conditions in the General Exception, including the requirement to maintain natural ocean water quality in the affected ASBS.

F5. ADDITIONAL REQUIREMENTS FOR WATERFRONT AND MARINE OPERATIONS PERMITTEES

The following requirements are adapted from the General Exception, section III.

1. Any Permittee engaged in waterfront and marine operations shall update its Waterfront and Marine Operations Management Plan (updated Waterfront Plan) to include the updates identified below in paragraphs F5.1.a. through F5.1.d. Updates shall reflect any procedural changes since submittal of the

existing Waterfront Plan under the previous permit. Updates may be added in redline/strikethrough format or as an addendum to the existing Waterfront Plan. If submitting an addendum, the Permittee shall include the existing Waterfront Plan.

- a. Update the Management Practices for any waste discharges associated with the operation and maintenance of vessels, moorings, piers, launch ramps, and cleaning stations in order to ensure that beneficial uses are protected, and natural water quality is maintained in the affected ASBS.
 - b. Update the appropriate Management Practices, described in [The Plan for California's Nonpoint Source Pollution Control Program](https://www.waterboards.ca.gov/water_issues/programs/nps/plans_policies.html), (https://www.waterboards.ca.gov/water_issues/programs/nps/plans_policies.html) for marinas and recreational boating activities, or equivalent practices, to ensure that nonpoint source pollutant discharges do not alter natural water quality in the affected ASBS.
 - c. Update the Management Practices to address public education and outreach to ensure that the public is adequately informed that waste discharges to the affected ASBS are prohibited or limited by special conditions in the General Exception, Special Protections (General Exception, B). The Management Practices shall include appropriate signage, or similar measures, to inform the public of the ASBS restrictions and to identify the ASBS boundaries.
 - d. Update the Management Practices to address the prohibition against trash discharges to ASBS. The Management Practices shall include the provision of adequate trash receptacles for marine recreation areas, including parking areas, launch ramps, and docks. The updated Management Practices shall also include appropriate Management Practices to ensure that the receptacles are adequately maintained and secured in order to prevent trash discharges into the ASBS. Appropriate Management Practices include covering the trash receptacles to prevent trash from being windblown, staking or securing the trash receptacles so they don't tip over, and routinely emptying the receptacles to prevent overflow.
2. Conditions for Waterfront and Marine Operations Permittees
- a. The discharge of chlorine, soaps, petroleum, other chemical contaminants, trash, fish offal, or human sewage to ASBS is prohibited. Sinks and fish cleaning stations are point source discharges of wastes and are prohibited from discharging into ASBS. Anthropogenic accumulations of discarded fouling organisms on the sea floor must be minimized.
 - b. Limited-term activities, such as the repair, renovation, or maintenance of waterfront facilities, including, but not limited to, piers, docks, moorings,

and breakwaters, are authorized only in accordance with Chapter III.E.2 of the 2019 [Ocean Plan](#).

- c. The State Water Board Executive Director may, for good cause, authorize additional time to comply with the Waterfront Plan. Good cause means a physical impossibility or lack of funding.

F6. ADDITIONAL REQUIREMENTS FOR PARKS AND RECREATION FACILITIES – UPDATED ASBS COMPLIANCE PLAN

The following requirements are adapted from the General Exception, section III.

1. Any Permittee engaged in parks and recreation facilities shall provide an update, as applicable, to the requirements listed below in F6.1.a through F6.1.f. The Permittee shall include a section in the updated ASBS Compliance Plan to address any changes to stormwater runoff from parks and recreation facilities. Updates shall reflect any procedural changes to the existing ASBS Plan, which was submitted under the previous permit. Updates may be in redline/strikethrough format or as an addendum to the existing ASBS Compliance Plan. If submitting an addendum, the Permittee shall include the existing ASBS Compliance Plan. If no updates are made to the existing ASBS Compliance Plan, the Permittee shall send a letter to the State Water Board Executive Director and shall upload the letter to SMART as an attachment.
 - a. Update any newly identified pollutant sources, including sediment sources, which may result in waste entering stormwater runoff. Pollutant sources include, but are not limited to, roadside rest areas and vistas, picnic areas, campgrounds, trash receptacles, maintenance facilities, park personnel housing, portable toilets, leach fields, fuel tanks, roads, piers, and boat launch facilities.
 - b. Add new or revise existing best management practices that will be implemented to control soil erosion (both temporary and permanent erosion controls) and reduce or eliminate pollutants in stormwater runoff in order to achieve and maintain natural ocean water quality conditions in the affected ASBS. The updated plan shall include any revisions to best management practices to ensure that trails and culverts are maintained to prevent erosion and minimize waste discharges to ASBS.
 - c. Add new or revise existing best management practices to prevent the discharge of pesticides or other chemicals, including agricultural chemicals, in stormwater runoff to the affected ASBS.
 - d. Add new or revise existing best management practices that address public education and outreach. The goal of these best management practices is

to ensure that the public is adequately informed that waste discharges to the affected ASBS are prohibited or limited by special conditions in the General Exception. The update shall include any revisions to best management practices for signage at camping, picnicking, beach and roadside parking areas, and visitor centers, or other appropriate measures, which notify the public of any applicable requirements of the Special Protections as laid out in this Attachment and identify the ASBS boundaries.

- e. Add new or revise existing best management practices that address the prohibition against the discharge of trash to ASBS. The best management practices shall include measures to ensure that adequate trash receptacles are available for public use at visitor facilities, including parking areas, and that the receptacles are adequately maintained to prevent trash discharges into the ASBS. Appropriate measures include covering trash receptacles to prevent trash from being windblown and routinely emptying the receptacles to prevent overflows.
- f. Add new or revise existing best management practices to address runoff from parking areas and other developed features to ensure that the runoff does not alter natural ocean water quality in the affected ASBS. Best management practices shall include measures to reduce pollutant loading in runoff to the ASBS through installation of natural area buffers (low impact development), treatment, or other appropriate measures.

F7. MONITORING REQUIREMENTS

F7.1 General Monitoring Requirements

1. A Monitoring Plan shall be submitted with the Updated ASBS Compliance Plan (see section F4, below).
2. The Permittees listed in Table F2 shall participate in the Core Discharge and Ocean Receiving Monitoring Program for at least one more year, regardless of monitoring status under the previous permit, with the exception of Pillar Point (see next section). Permittees may propose additional Reference Area Monitoring. If there are no exceedances found after one year of monitoring, Permittees may submit a request for reduction or suspension of monitoring. The permittee must clearly state the monitoring program for which the request is being submitted and the justification. Permittees shall continue with monitoring until any reduction or suspension in monitoring is submitted and approved by the State Water Board Executive Director.
3. Pillar Point received approval for a reduction in monitoring under the 2013 Permit and this approval remains valid. Thus, Pillar Point shall continue monitoring for constituents that did not receive approval for a reduction or

suspension.

4. Monitoring results shall be compared to chart F8, the Flow Chart to Determine Exceedance or Compliance: ASBS Special Protections. Monitoring results shall be reported in the Annual ASBS Compliance Status report, including clearly identifying exceedances (e.g., bold or italic font). For post-storm monitoring, results shall be tabulated to demonstrate that Permittees are not causing or contributing to alteration of natural ocean water quality for each location/parameter pair that exceed the 85th percentile of reference sample collections (see [Table F9](#)).
5. The Permittee shall repeat the procedure for continuing or recurring exceedance of natural ocean water quality conditions in accordance with the [General Exception](#), Attachment B, section I.A.2.h., unless the Permittee has complied with the procedures described below and is implementing an updated ASBS Compliance Plan according to the requirements of this Attachment.
6. Sample locations and sampling periods must be determined considering safety issues. Sampling may be postponed upon notification to the State Water Board Executive Director if hazardous conditions prevail.

F7.2 Core Discharge Monitoring Program

Core Discharge Monitoring is ASBS monitoring of stormwater effluents from the stormwater outfalls at the priority discharge locations.

1. General Sampling Requirements for Timing and Storm Size:
Runoff must be collected during a storm event that is greater than 0.1 inch and generates runoff, and at least 72 hours from the previously measurable storm event. Runoff samples shall be collected when post-storm receiving water is sampled and analyzed for the same constituents as receiving water samples as described below.
2. Runoff Flow Measurements
 - a. For municipal stormwater outfalls in existence as of December 31, 2007, 18-inches (457 millimeters) or greater in diameter/width (including multiple outfall pipes in combination having a width of 18-inches), runoff flows must be measured or calculated using a method acceptable to and approved by the Regional Water Board Executive Officer.
 - b. Runoff flow measurements or calculations shall be reported annually for each precipitation season.
3. Runoff Samples – Storm Events

- a. For outfalls equal to or greater than 18 inches (0.46 meters) in diameter or width:
 - 1) Samples of stormwater runoff shall be analyzed for oil and grease; total suspended solids; and, within the range of the southern sea otter, indicator bacteria or some other measure of fecal contamination; and
 - 2) Samples of stormwater runoff shall be analyzed for critical life stage chronic toxicity (one invertebrate or algal species) at least once during each storm season when receiving water is sampled in the ASBS.
- b. For outfalls equal to or greater than 36 inches (0.91 meters) in diameter or width:
 - 1) Samples of stormwater runoff shall be analyzed for oil and grease; total suspended solids; and, within the range of the southern sea otter, indicator bacteria or some other measure of fecal contamination; and
 - 2) Samples of stormwater runoff shall be further analyzed for Ocean Plan Table 3 metals for protection of marine life, Ocean Plan polynuclear aromatic hydrocarbons (PAHs), current use pesticides (pyrethroids and OP pesticides), and nutrients (ammonia, nitrate and phosphates); and
 - 3) Samples of stormwater runoff shall be analyzed for critical stage chronic toxicity (one invertebrate or algal species) at least once during each storm season when receiving water is sampled in the ASBS.
- c. If a Permittee has no outfall greater than 36 inches, then stormwater runoff from the Permittee's largest outfall shall be further analyzed during the same storm as receiving water samples for Ocean Plan Table 3 metals for protection of marine life, Ocean Plan polynuclear aromatic hydrocarbons (PAHs), current use pesticides (pyrethroids and OP pesticides), and nutrients (ammonia, nitrate and phosphates).
- d. For a Permittee not participating in a regional monitoring program, a minimum of the two largest outfalls or 20 percent of the larger outfalls, whichever is greater, shall be sampled (flow weighted composite samples) at least three times annually during wet weather (storm event) and analyzed for all Ocean Plan [Table 4](#) constituents, [Table 3](#) constituents for marine aquatic life protection (except for toxicity, only chronic toxicity for three species shall be required), DDT, PCBs, Ocean Plan PAHs, OP pesticides, pyrethroids, nitrates, phosphates, and Ocean Plan indicator bacteria. For parties discharging to ASBS in more than one Regional Water Board region, at a minimum, one (the largest) such discharge shall be sampled annually in each Region.

4. The Executive Director of the State Water Board may reduce or suspend core monitoring once the storm runoff is fully characterized. The Executive Director of the State Water Board may require additional monitoring as appropriate.

F7.3 Ocean Receiving Water Monitoring Program: Choice of Individual Monitoring Program or Regional Integrated with Reference Area Monitoring Program

The following Ocean Receiving Water Monitoring is required if the Permittee has not completed this monitoring as required under the previous permit. In addition to performing the Core Discharge Monitoring Program, all Permittees must perform ocean receiving water monitoring. In order to fulfill the requirements for monitoring the physical, chemical, and biological characteristics of the ocean receiving waters within their ASBS, Permittees may choose either (1) an individual monitoring program, or (2) participation in a regional integrated with reference area monitoring program.

1. Individual Monitoring Program:

The requirements listed below are for those Permittees who elect to perform an individual monitoring program to fulfill the requirements for monitoring the physical, chemical, and biological characteristics of the ocean receiving waters within the affected ASBS. In addition to Core Discharge Monitoring, the following additional monitoring requirements shall be met:

- a. Three times annually, during wet weather (storm events), the receiving water at the point of discharge from the outfalls shall be sampled and analyzed for 2019 Ocean Plan Table 4 constituents, Table 3 constituents for marine aquatic life, DDT, PCBs, Ocean Plan PAHs, OP pesticides, pyrethroids, nitrates, phosphates, salinity, chronic toxicity (three species), and 2019 Ocean Plan indicator bacteria.

The sample location for the ocean receiving water shall be in the surf zone at the point of discharges; this must be at the same location where stormwater runoff is sampled. Receiving water shall be sampled at approximately the same time prior to (pre-storm) and during (or immediately after) the same storm (post storm). Reference water quality shall also be sampled and analyzed for the same constituents pre-storm and post-storm, during the same storms when receiving water is sampled. Reference stations will be determined by the State Water Board's Division of Water Quality and the applicable Regional Water Board(s).

- b. Sediment sampling shall occur at least three times during every five (5) year period. The subtidal sediment (sand or finer, if present) at the discharge shall be sampled and analyzed for Ocean Plan Table 3 constituents for marine aquatic life, DDT, PCBs, PAHs, pyrethroids, and

OP pesticides. For sediment toxicity testing, only an acute toxicity test using the amphipod *Eohaustorius estuarius* must be performed.

- c. A quantitative survey of intertidal benthic marine life shall be performed at the discharge and at a reference site. The Permittee shall perform a survey at least once every five (5) year period. The survey design is subject to approval by the Regional Water Board and the State Water Board's Division of Water Quality. The results of the survey shall be completed and submitted to the State Water Board and Regional Water Board at least six months prior to the end of the permit cycle.
- d. Once during each five (5) year period, a bioaccumulation study shall be conducted to determine the concentrations of metals and synthetic organic pollutants at representative discharge sites and at representative reference sites. The study design is subject to approval by the Regional Water Board and the State Water Board's Division of Water Quality. The bioaccumulation study may include California mussels (*Mytilus californianus*) and/or sand crabs (*Emerita analoga* or *Blepharipoda occidentalis*). Based on the study results, the Regional Water Board and the State Water Board's Division of Water Quality, may adjust the study design in subsequent permits, or add or modify additional test organisms (such as shore crabs or fish), or modify the study design appropriate for the area and best available sensitive measures of contaminant exposure.
- e. Marine Debris: Representative quantitative observations for trash by type and source shall be performed along the coast of the ASBS within the influence of the Permittee's outfalls. The design, including locations and frequency, of the marine debris observations is subject to approval by the Regional Water Board and State Water Board's Division of Water Quality.
- f. The monitoring requirements of the Individual Monitoring Program in this section are minimum requirements. After a minimum of one (1) year of continuous water quality monitoring of the discharges and ocean receiving waters, the State Water Board Executive Director may require additional monitoring, or adjust, reduce or suspend receiving water and reference station monitoring.

2. Regional Integrated with Reference Area Monitoring Program:

Permittees may elect to participate in a regional integrated monitoring program, in lieu of an individual monitoring program described in section F6.2.1, above, to fulfill the requirements for monitoring the physical, chemical, and biological characteristics of the ocean receiving waters within their ASBS.

This regional approach shall characterize natural ocean water quality, pre- and post-storm, in ocean reference areas near the mouths of identified open space watersheds and the effects of the discharges on natural ocean water

quality (physical, chemical, and toxicity) in the ASBS receiving waters, and should include benthic marine aquatic life and bioaccumulation components. The design of the ASBS stratum of a regional integrated monitoring program may deviate from the otherwise prescribed individual monitoring program approach above, if approved by the State Water Board's Division of Water Quality and the applicable Regional Water Boards.

- a. Ocean reference areas shall be located at the drainages of flowing watersheds with minimal development (in no instance more than 10% development) and shall not be located in CWA Section 303(d) listed waterbodies or have tributaries that are 303(d) listed. Reference areas shall be free of wastewater discharges and anthropogenic non-stormwater runoff. A minimum of low threat storm runoff discharges (e.g. stream highway overpasses and campgrounds) may be allowed on a case-by-case basis.

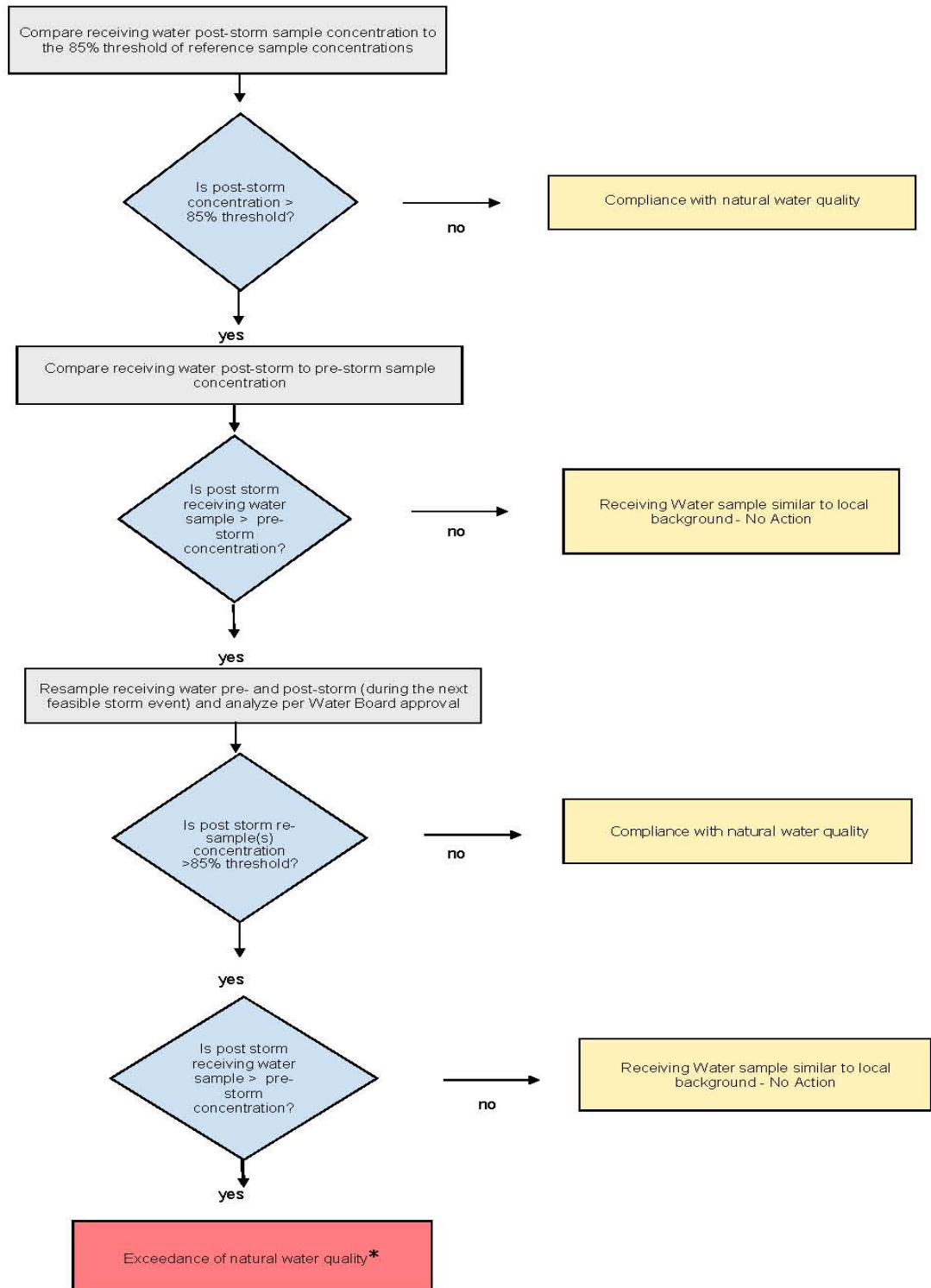
Reference areas shall be located in the same region as the ASBS receiving water monitoring occurs. The reference areas for each Region are subject to approval by the participants in the regional monitoring program and the State Water Board's Division of Water Quality and the applicable Regional Water Board(s). A minimum of three ocean reference water samples must be collected from each station, each from a separate storm. A minimum of one reference location shall be sampled for each ASBS receiving water site sampled per responsible party. For parties discharging to ASBS in more than one Regional Water Board region, at a minimum, one reference station and one receiving water station shall be sampled in each region.

- b. ASBS ocean receiving water must be sampled in the surf zone at the location where the runoff makes contact with ocean water (i.e. at "point zero"). Ocean receiving water stations must be representative of worst-case discharge conditions (i.e. co-located at a large drain greater than 36 inches, or if drains greater than 36 inches are not present in the ASBS then the largest drain greater than 18 inches.) Ocean receiving water stations are subject to approval by the participants in the regional monitoring program and the State Water Board's Division of Water Quality and the applicable Regional Water Board(s). A minimum of three ocean receiving water samples must be collected during each storm season from each station, each from a separate storm. A minimum of one receiving water location shall be sampled in each ASBS per responsible party in that ASBS. For parties discharging to ASBS in more than one Regional Water Board region, at a minimum, one reference station and one receiving water station shall be sampled in each region.

- c. Reference and receiving water sampling shall commence during the first full storm season following the adoption of these special conditions, and post-storm samples shall be collected when annual stormwater runoff is sampled. Sampling shall occur in a minimum of two storm seasons. For those ASBS Permittees that have already participated in the Southern California Bight 2008 ASBS regional monitoring effort, sampling may be limited to only one storm season.
 - d. Receiving water and reference samples shall be analyzed for the same constituents as stormwater runoff samples. At a minimum, constituents to be sampled and analyzed in reference and discharge receiving waters must include oil and grease, total suspended solids, Ocean Plan Table 3 metals for protection of marine life, Ocean Plan PAHs, pyrethroids, OP pesticides, ammonia, nitrate, phosphates, and critical life stage chronic toxicity for three species. In addition, within the range of the southern sea otter, indicator bacteria or some other measure of fecal contamination shall be analyzed.
3. Waterfront and Marine Operations: In addition to the above requirements for ocean receiving water monitoring, additional monitoring must be performed for marinas and boat launch and pier facilities:
- a. For all marina or mooring field operators, in mooring fields with 10 or more occupied moorings, the ocean receiving water must be sampled for Ocean Plan indicator bacteria, residual chlorine, copper, zinc, grease and oil, methylene blue active substances (MBAS), and ammonia nitrogen.
 - 1) For mooring field operators opting for an individual monitoring program, above, this sampling must occur weekly (on the weekend) from May through October.
 - 2) For mooring field operators opting to participate in a regional integrated monitoring program, above, for submitting reports, this sampling must occur from May through October on a high weekend in each month. The Water Boards may allow a reduction in the frequency of sampling, through the regional monitoring program, after the first year of monitoring.
 - b. For all mooring field operators, the subtidal sediment (sand or finer, if present) within the mooring fields and below piers shall be sampled and analyzed for Ocean Plan Table 3 metals (for marine aquatic life beneficial use), acute toxicity, PAHs, and tributyltin. For sediment toxicity testing, only an acute toxicity test using the amphipod *Eohaustorius estuarius* must be performed. This sampling shall occur at least three times during a five (5) year period. For mooring field operators opting to participate in a regional integrated monitoring program, the Water Boards may allow a

reduction in the frequency of sampling after the first sampling effort's results are assessed.

F8. FLOWCHART TO DETERMINE EXCEEDANCE OR COMPLIANCE: ASBS SPECIAL PROTECTIONS



F9. TABLES

The Table of 85th Percentile of Natural Ocean Water Quality Values of All Reference Area Monitoring Sites (Regional Monitoring Program) provides the reference water quality data by sampling region. Under the previous permit, three regions were selected and monitored for reference area monitoring: North Coast, South Coast, and Central Coast. Ocean reference areas were located at in areas free of wastewater discharges, anthropogenic non-storm water runoff, and other requirements as provided in the Glossary definition for “Ocean Reference Area Sampling.” The Permittee shall use these values when assessing exceedances of 85th Percentile of Natural Ocean Water Quality for the given reference area monitoring site.

Table F9. Table of 85th Percentile of Natural Ocean Water Quality Values at Reference Area Monitoring Sites (for the Regional Integrated Monitoring Program*)

Constituent	Units	North Coast Monitoring Sites	South Coast Monitoring Sites	Central Coast Monitoring Sites
Arsenic	µg/L	1.76	1.8	1.6410
Cadmium	µg/L	0.055	0.15	0.0607
Chromium	µg/L	4.864	1.9	1.7450
Copper	µg/L	2.056	1.5	1.1115
Lead	µg/L	0.548	0.5	0.2194
Mercury	µg/L	0.006	0.0006	4.2275
Nickel	µg/L	4.605	1.3	1.6666
Selenium	µg/L	0.029	0.003	0.1135
Silver	µg/L	0.130	0.08	0.6000
Zinc	µg/L	8.479	18.6	2.6577
Total Suspended Solids	mg/L	50.816	48	24
Fecal Coliform	Most probable number per 100 milliliters	Not Applicable	Not Applicable	143
<i>Enterococcus</i>	Most probable number per 100 milliliters	Not Applicable	Not Applicable	229
<i>E. coli</i>	Most probable number per 100 milliliters	Not Applicable	Not Applicable	125.5
Urea	mg/L	Not Applicable	Not Applicable	10
Nitrate	mg/L	2.773	0.34	0.675
Orthophosphate	mg/L	0.09	0.100	0.08
Ammonia	mg/L	0.042	0.015	ND
Sum of PAHs	µg/L	0.047	0.0125	ND

Constituent	Units	North Coast Monitoring Sites	South Coast Monitoring Sites	Central Coast Monitoring Sites
Sum of OPs	µg/L	ND	0.0006	ND
Sum of Pyrethroids	µg/L	ND	0.00675	ND
Oil and Grease	mg/L	ND	0.5	ND

Table Notes:

* Indicates that this item is not for Permittees participating in individual monitoring programs.

µ/L is micrograms per liter.

mg/L is milligrams per liter.

ND is non-detect.

State Water Board interpreted 0 as non-detect.

2019 Ocean Plan Table 3 and Table 4

Best management practices installed to control storm water runoff discharges (at the end-of-pipe) during a design storm shall be designed to achieve on average either of the following target levels:

1. Constituents listed below for Table 3 Instantaneous Maximum Water Quality Objectives in the 2019 Ocean Plan; or
2. A 90% reduction in pollutant loading during storm events, for the Permittee's total discharges.

2019 Ocean Plan Table 3: Monitoring Constituent List and Instantaneous Maximum Water Quality Objectives

Constituent	Units	Instantaneous Maximum Water Quality Objectives
Arsenic	µg/L	80
Cadmium	µg/L	10
Chromium (hexavalent)	µg/L	20
Copper	µg/L	30
Lead	µg/L	20
Mercury	µg/L	0.4
Nickel	µg/L	50
Selenium	µg/L	150
Silver	µg/L	7
Zinc	µg/L	200
Cyanide	µg/L	10
Total Chlorine Residual	µg/L	60
Ammonia (as Nitrogen)	µg/L	6000
Acute Toxicity	Acute Toxicity Units (Tua)	N/A

Constituent	Units	Instantaneous Maximum Water Quality Objectives
Chronic Toxicity	Chronic Toxicity Units (Tuc)	N/A
Phenolic Compounds (non-chlorinated)	µg/L	300
Chlorinated Phenolics	µg/L	10
Endosulfan	µg/L	0.027
Endrin	µg/L	0.006
Hexachlorocyclohexane (HCH)	µg/L	0.012

2019 Ocean Plan Table 4 Monitoring Constituent List

Constituent	Units
Grease and Oil	mg/L
Suspended Solids	mg/L
Settleable Solids	ml/L
Turbidity	Nephelometric Turbidity Unit (NTU)
pH	Unitless number

F10. REPORTING

Beginning with October 15 after the effective date of this Order and thereafter annually by October 15 of each year, the Permittee shall submit its Annual ASBS Compliance Status report. Each report shall cover the period of July 1 through June 30 of each year. The report shall be submitted through SMARTS. The report shall include:

1. Description and status of compliance with each of the requirements in this Attachment, as follows:
 - a. All Permittees shall report the status of compliance with sections F2 through F4, and F7.
 - 1) Waterfront and marine operations Permittees shall additionally report compliance with section F5.
 - 2) Parks and recreation facilities Permittees shall additionally report compliance with section F6.
2. Description of monitoring performed interpretation of sampling results, and status of compliance with applicable monitoring data in the 85th Percentile of Natural Ocean Water Quality Values of Reference Area Monitoring Sites (Regional Monitoring Program) table.

3. Description, location, and status of installation of best management practices required because of exceedance of applicable 85th Percentile of Natural Ocean Water Quality Values of Reference Area Monitoring Sites (Regional Monitoring Program) table.
4. Description, location, and purpose of any low impact development structures installed during the reporting period.
5. Tabulated monitoring results indicating the location ID; status of compliance with natural ocean water quality; resampling results; and plans/schedule for resampling when an exceedance is detected. Tabulated monitoring results shall include the following:
 - a. ASBS name and location number (e.g., Ano Nuevo (15)), monitoring location ID number.
 - b. Certified laboratory analysis shall be tabulated and reported as follows:
 - 1) The parameter
 - 2) The method used to analyze the parameter
 - 3) The method detection limit
 - 4) The Reporting Limit
 - 5) Units
 - 6) A column containing comparison values. For receiving water data, this shall be the applicable Natural Ocean Water Quality Reference data. For Core discharge monitoring, this shall be the instantaneous maximum water quality objective in Table 3 of the 2019 Ocean Plan.
 - 7) Analytical results. Results above the applicable comparison value shall be highlighted (e.g., bold font) to indicate an exceedance.
 - 8) Results detected above the method detection limit but below the reporting limit shall be reported as "DNQ" (detected but not quantified).
 - 9) DNQs shall be flagged with a "J" along with the estimated value, method detection limit, and reporting limit. Copies of certified analytical results shall be included as attachments.